

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.ispto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

01/21/2003

Gary L. Loser, Esq. Vice President and General Counsel Varian Semiconductor Equipment Associates, Inc. 35 Dory Road Gloucester, MA 01930 EXAMINER

BERMAN, JACK I

ART UNIT

CLASS-SUBCLASS

2881

250-492210

DATE MAILED: 01/21/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/699.653	10/30/2000	Anthony Renau	V0077/7147WRM	6850

TITLE OF INVENTION: BI MODE ION IMPLANTION WITH NON-PARALLEL ION BEAMS

APPLN, TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$650	\$0	\$650	04/21/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

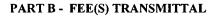
B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

□ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE

**Commissioner for Patents** Washington, D.C. 20231

(703)746-4000 <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where

appropriate. All further com indicated unless corrected b maintenance fee notification	elow or directed otherwi	e Patent, advance orders se in Block 1, by (a) spe	and notification ecifying a new co	of maintenance fe- rrespondence addi	es will be mailed to the current ress; and/or (b) indicating a sepa	correspondence address as trate "FEE ADDRESS" for	
CURRENT CORRESPONDENC	E ADDRESS (Note: Legibly mark 190 01/21/2003		Block T)	Note: A certifica Fee(s) Transmit accompanying p	te of mailing can only be used fo ttal. This certificate cannot l apers. Each additional paper, s must have its own certificate of m	r domestic mailings of the be used for any other such as an assignment or	
Gary L. Loser, Es Vice President and Varian Semiconduc	ciates, Inc.		. I hereby certify	Certificate of Mailing or Trans that this Fee(s) Transmittal is	smission being deposited with the		
35 Dory Road Gloucester, MA 01		envelope address transmitted to the	stal Service with sufficient postaged to the Box Issue Fee address USPTO, on the date indicated by	above, or being facsimile elow.			
						(Depositor's name)	
						(Signature)	
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09/699,653 FITLE OF INVENTION: BI	10/30/2000 I MODE ION IMPLANTI	ION WITH NON-PARAI	Anthony Renau LLEL ION BEAN	18	V0077/7147WRM	6850	
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nonprovisional	YES	\$650		\$0	\$650	04/21/2003	
EXAMIN	NER	ART UNIT	CLASS-SUBCL	ASS			
BERMAN,	JACK I	2881	250-49221	0			
1. Change of corresponden CFR 1.363).	ce address or indication o	•	on the patent from p to 3 registered p alternatively, (2)	patent attorneys			
Address form PTO/SB/12	22) attached.	Correspondence		firm (having as a member a registered by or agent) and the names of up to 2			
U "Fee Address" indication PTO/SB/47; Rev 03-02 of Number is required.	on (or "Fee Address" Indi or more recent) attached. I	cation form Use of a Customer	registered patent attorneys or agents. If no name is listed, no name will be printed.				
3. ASSIGNEE NAME AND			•	•• •			
PLEASE NOTE: Unless as been previously submitted (A) NAME OF ASSIGNED	to the USPTO or is being	submitted under separate	cover. Completion	satent. Inclusion of n of this form is N and STATE OR	f assignee data is only appropriat OT a substitute for filing an assig COUNTRY)	e when an assignment has nment.	
Please check the appropriate	assignee category or cate	gories (will not be printed	d on the patent)	<b>山</b> individual	U corporation or other private gr	roup entity  ugovernment	
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☐ Publication Fee ☐ Payment by credit card. Form PTO-2038 is attached. ☐ Advance Order - # of Copies ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐					credit any overpayment, to		
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This collection of informa obtain or retain a benefit application. Confidentiality estimated to take 12 minut completed application for case. Any comments on suggestions for reducing t Patent and Trademark Off NOT SEND FEES OR Commissioner for Patents,	tion is required by 37 Cl by the public which is to y is governed by 35 U.S.C tes to complete, including m to the USPTO. Time the amount of time you his burden, should be sen ice, U.S. Department of C COMPLETED FORM: Washington, DC 20231	FR 1.311. The information of file (and by the USPTC. 122 and 37 CFR 1.14. The gathering, preparing, and will vary depending upon a require to complete the tothe Chief Information of the Commerce, Washington, STO THIS ADDRES	on is required to D to process) an This collection is d submitting the n the individual his form and/or on Officer, U.S. D.C. 20231. DO S. SEND TO:				
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09/699,653	10/30/2000	Anthony Renau	V0077/7147WRM	6850
7:	590 01/21/2003		EXAMIN	ER
Gary L. Loser, Es			BERMAN, J	IACK I
Vice President and Varian Semiconduc	General Counsel ctor Equipment Associ	ates, Inc.	ART UNIT	PAPER NUMBER
35 Dory Road	020		2881	
Gloucester, MA 01	טנע		DATE MAILED: 01/21/2003	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 250 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 250 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



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75	90 01/21/2003		EXAMIN	ER	
Gary L. Loser, Es	sq.		BERMAN, .	JACK I	
Vice President and Varian Semiconduc	General Counsel etor Equipment Associa	ates. Inc.	ART UNIT	PAPER NUMBER	
35 Dory Road			2881		
Gloucester, MA 01930 UNITED STATES			DATE MAILED: 01/21/2003		

## Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003: Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

Application No.	Applicant(s)	
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09/699,653	RENAU ET AL.	
Examiner	Art Unit	
Jack I. Berman	2881	
IS (OR REMAINS) CLOSED 35) or other appropriate comn	in this application. If not include nunication will be mailed in due o	d course. THIS
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of this communication to file of this application. THIS TH	a reply complying with the requi	rements noted EXTENDABLE.
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ng correction filed, wh	nich has been approved by the E	xaminer.
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	IS (OR REMAINS) CLOSED B5) or other appropriate commerce RIGHTS. This application is an and MPEP 1308.  If the Examiner.  Inder 35 U.S.C. § 119(a)-(d) are been received.  In the examiner are been received in Applicated documents have been received documents have been received application has been received application has been received application. THIS THE bmitted. Note the attached Epason(s) why the oath or deciperson's Patent Drawing Revenue.  In the examiner application application to file application. THIS THE bmitted. Note the attached Epason(s) why the oath or deciperson's Patent Drawing Revenue.  In the examiner appropriate comment are with a transmittal letter and apposit of BIOLOGICAL MA	the Examiner.  under 35 U.S.C. § 119(a)-(d) or (f).  ave been received.  ave been received in Application No  documents have been received in this national stage applicat

Application/Control Number: 09/699,653 Page 2

Árt Unit: 2881

process.

The following is an examiner's statement of reasons for allowance: The prior art does not teach to perform ion implantation by measuring the angle of non-parallelism of the ion beam and then performing a first implant with the workpiece tilted at an angle equal to or greater in magnitude than the measured angle of non-parallelism followed by a second implant with the workpiece tilted at an angle of opposite sign and of magnitude also equal to or greater than the measured angle of non-parallelism. Nor does the prior art disclose the apparatus to practice this

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack I. Berman whose telephone number is (703) 308-4849. The examiner can normally be reached on M-F (8:30-6:00) with every second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (703) 308-4116. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Jack I. Berman Primary Examiner Art Unit 2881